

The following is a complete listing of all claims in the application, with an indication of the status of each:

Listing of Claims

1-13 (Cancelled).

14. (Previously presented) Vascularized bioartificial tissue according to Claim 25, wherein the at least one vessel passes through said tissue and other vessels are propagated into the tissue from the at least one vessel.

15. (Previously presented) Vascularized bioartificial tissue according to Claim 14 wherein the at least one vessel is selected from the group consisting of a vessel of natural origin from human or animal, and a biocompatible synthetic vessel.

16. (Currently amended) Vascularized bioartificial tissue according to Claim 14 wherein the tissue is a synthetic bioartificial heart tissue having cardiomyocytes in the matrix.

17. (Currently amended) Vascularized bioartificial tissue according to Claim 14 wherein the tissue is synthetic bioartificial skin tissue having keratinocytes in the matrix.

18-24. (Cancelled)

25. (Currently amended) A vascularized bioartificial tissue ~~or tissue precursor for implantation~~, made by the process of:

inserting at least one vascularizing vessel into a mixture of viable cells in or on a matrix whereby the at least one vessel is inserted prior to or at the beginning of cultivation of the mixture of the matrix and cells; and

cultivating said mixture wherein the at least one vessel propagates and a vascularized bioartificial tissue is obtained, and wherein said step of cultivating includes supplying constituents to said at least one vessel from a location remote from said tissue.

26. (New) The vascularized bioartificial tissue of claim 25, wherein said process further comprises the step of providing a mechanical, nutritious or migrative stimulus to said mixture during cultivation.

27. (New) The vascularized bioartificial tissue of claim 25, wherein said at least one vessel contains branches.

28. (New) The vascularized bioartificial tissue of claim 25, wherein said at least one vessel contains lateral openings.

29. (New) The vascularized bioartificial tissue of claim 25, wherein said at least one vessel is inherently porous.